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MAKEUP OR CARE COMPOSITION, WITHOUT TRANSFER, CONTAINING  
A SOLID ORGANOPOLYSILOXANE ELASTOMER AND AN OILY PHASE

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The invention relates to a composition without transfer containing an organopolysiloxane and an oily phase containing at least one volatile oil at ambient temperature. This composition is more specifically a care or makeup composition for the lips or a makeup foundation composition for the makeup of the face and body. This composition is gentle during application, it spreads easily, it is not sticky and it does not have a drying effect on the skin and the lips.

**Description**

The present invention relates to a care and/or makeup composition for the skin and/or lips of humans, and in particular to a lipstick or a makeup foundation, in stick, cupel or cream form.

The known lipstick and makeup foundation compositions generally comprise oily substances, such as oils, paste-like compounds, and waxes, as well as a particulate phase, generally consisting of fillers and of pigments.

These compositions, when applied to the skin or the lips, present the drawback of being transferred, that is of depositing, at least in part, leaving traces, on certain supports with which they may come in contact, particularly glasses, cups, cigarettes, items of clothing or the skin. Consequently, the durability of the film applied to the skin or the lips is poor, requiring regular renewal of the application of the makeup foundation or lipstick composition. Moreover, the appearance of these unacceptable traces, particularly on the collars of shirts, can discourage some women from using this type of makeup.

In connection with this drawback of transfer of the lipstick compositions of the prior art, one must also note the unpleasant tendency of the films of these compositions to dissolve in the plant oils that are generally used in certain prepared dishes, such as salads with vinaigrette, requiring women to repeat the application of makeup to the lips after a meal.

For several years, cosmeticians have been interested in lipstick compositions, and more recently, in makeup foundation compositions "without transfer." Thus, the company Shiseido has considered, in its Patent Application JP-A-61-65809, lipstick compositions "without transfer" containing 1-70 wt% of a siloxysilicate resin (with three-dimensional matrix) comprising pendant alkylated or phenylated chains having 1-6 carbon atoms, and 10-98 wt% volatile silicone oil, with cyclic silicone chain and powdered fillers. Similarly, the company Noevier has described, in the document JP-A-62-61911, lipstick, eyeliner and makeup foundation

compositions "without transfer" comprising one or more volatile silicones associated with one or more hydrocarbon waxes.

These compositions, although entirely satisfactory with regard to the "without transfer" property present the drawback of leaving, after the evaporation of the silicone oils, a film on the lips, which becomes uncomfortable over time (sensation of drying and pulling), discouraging a certain number of women from using this type of lipstick. To improve the comfort of this type of composition, one could add siliconated or unsiliconated nonvolatile oils, but in that case one loses the "without transfer" effectiveness.

More recently, the company Revlon considered in its European Patent Application No. EP-A-602905 lipsticks "without transfer" containing a cyclic or linear volatile silicone with pendant methyl chains and a silicone resin comprising an esterified pendant chain having 12-18 carbon atoms. The lipstick film that remains on the lips after the evaporation of the volatile silicone still has the drawback of lacking comfort during the application and, particularly, of being too dry. In addition, it considered, in its European Patent Application No. EP-A-709 083, makeup foundations "without transfer" containing a volatile silicone and associated with a siloxysilicate resin. These makeup foundations still present the drawback of relative discomfort and of drying over time.

The present invention precisely relates to a care or makeup composition which makes it possible to overcome these drawbacks and which allows, in particular, the preparation of a film that does not transfer and that presents improved cosmetic properties compared to those of the "without transfer" products of the prior art, in particular properties of slipperiness, absence of pulling and absence of drying of the lips.

The invention not only applies to lip makeup products but also to lip care and/or treatment products, as well as to skin makeup and care products.

Thus the invention relates to a makeup or care composition without transfer, containing at least one solid organopolysiloxane elastomer which is partially crosslinked, associated with an oily phase containing at least one oil which is volatile at ambient temperature.

The term "elastomer" denotes a flexible material, which can deform and has viscoelastic properties, particularly the consistency of a sponge or of a flexible sphere.

The organopolysiloxane elastomers of the composition of the invention present a remarkable oil gelling capacity. They do not have a drying effect on the skin, and they impart good cosmetic properties. These novel elastomers lead to compositions which are comfortable during application, soft and not sticky to the touch. This softness is due, on the one hand, to the texture of the organopolysiloxanes and, on the other hand, to their properties which are comparable to that of microsponges that particularly trap nonvolatile oils. The

organopolysiloxanes according to the invention, by trapping the nonvolatile oils ensure, in addition, the 'without transfer' properties of the composition.

These compositions, after evaporation of the volatile oil, lead to a homogeneous and uniform film having a light texture; it is comfortable, not dry, does not cause pulling and it can be worn throughout the day.

The composition of the invention can be in the form of a paste, solid or cream. It can be an oil-in-water or water-in-oil emulsion, a solid or flexible anhydrous gel.

The organopolysiloxane elastomers according to the invention are partially or completely crosslinked and have a three-dimensional structure. Included in an oily phase, they undergo a transformation, depending on the content of oily phase used, from a product having a spongy appearance when they are used in the presence of low contents of the oily phase to a homogeneous gel in the presence of higher quantities of the oily phase. The gelling of the oily phase by these elastomers can be complete or partial.

The elastomers of the invention are generally in the form of a gel consisting of an organopolysiloxane elastomer having a three-dimensional structure, included in at least one hydrocarbon oil and/or silicone oil.

The organopolysiloxane elastomers according to the invention can be chosen from the crosslinked polymers described in European Patent Application No. EP-A-0295886. According to this application, they are obtained by a reaction of addition and of crosslinking, in the presence of a catalyst of the platinum type, of at least:

- (a) an organopolysiloxane having at least two lower  $C_2-C_6$  alkenyl groups per molecule; and
- (b) an organopolysiloxane having at least two hydrogen atoms bound to one silicon atom per molecule.

The organopolysiloxane elastomers according to the invention can also be chosen from those described in U.S. Patent No. 5,266,321. According to this patent, they are particularly chosen from:

- i) the organopolysiloxanes comprising  $R_2SiO$  and  $RSiO_{1.5}$  units, and optionally  $R_3SiO_{0.5}$  and/or  $SiO_2$  units in which the radicals R, independently of each other, represent a hydrogen, an alkyl such as methyl, ethyl or propyl, an aryl such as phenyl or tolyl, an unsaturated aliphatic group such as vinyl, where the ratio by weight of the  $R_2SiO$  units to the  $RSiO_{1.5}$  units ranges from 1/1 to 30/1;
- ii) the organopolysiloxanes that are insoluble and that swell in silicone oil, obtained by the addition of an organohydrogenopolysiloxane (1) and an organopolysiloxane (2) having unsaturated aliphatic groups in such a manner that the quantity of hydrogen or of unsaturated aliphatic groups in (1) and (2), respectively, is between 1 and 20 mol%, when the

organopolysiloxane is noncyclic, and between 1 and 50 mol%, when the organopolysiloxane is cyclic.

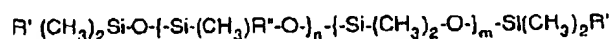
The organopolysiloxanes having the composition of the invention are, for example, those marketed under the names KSG6 from Shin-Etsu, Trefil E-505C or Trefil E-506C from Dow-Corning, Gransil from Grant Industries (SR-CYC, SR DMF 10, SR-DC556) or those marketed in the form of already constituted gels (KSG15, KSG17, KSG16, KSG18 from Shin-Etsu, Gransil SR 5CYC gel, Gransil SR DMF 10 gel, Gransil SR DC556 gel, SF 1204 and JK 113 from General Electric). One can also use a mixture of these commercial products.

It is preferred that the organopolysiloxane be present in the organopolysiloxane/oily phase mixture in the form of a homogeneous gel having a concentration from 0.3 to 40% of the total weight of the composition. It is preferred that the elastomer represents, in terms of active matter, 0.1-20% in the composition, and preferably 0.3-15%.

The oily phase can be of any type; generally it contains oils (products that are fluid at ambient temperature) which can be siliconated, fluorinated, fluorosiliconated, hydrocarbonated and optionally, partially siliconated oils. The best gelling is achieved with the siliconated or partially siliconated oils, apolar oils or oils with low polarity, and a few polar oils which are not detrimental to the stability of the system.

According to the invention, the oily phase contains one or more oils that are volatile at ambient temperature. A volatile oil is understood to denote an oil that is capable of evaporating upon contact with the skin or the lips.

These volatile oils can be hydrocarbon oils, silicone oils or mixtures thereof. The volatile silicones are, for example, silicones comprising a linear silicone structure and units with pendant alkyl chains and/or at the end of the silicone structure, where these alkyl chains are linear or branched and comprise 3-10 carbon atoms. The volatile silicones with alkyl chains particularly present the following formula (1):



where R' and R'' denote, independently of each other, H, methyl or a chain having 3-10 carbon atoms, n and m being whole numbers from 0 to 10 provided that, if R' is hydrogen or methyl, n is different from 0, and R'' represents an alkyl chain having 3-10 carbon atoms. Alkylated volatile silicones which are usable in the invention include the alkyl heptamethyltrisiloxanes with C<sub>4</sub>, C<sub>5</sub>, C<sub>6</sub>, C<sub>7</sub> and C<sub>8</sub> alkyl group, such as, for example, hexyl heptamethyltrisiloxane having the formula: (CH<sub>3</sub>)<sub>3</sub>-Si-O-Si(CH<sub>3</sub>)(C<sub>6</sub>H<sub>13</sub>)-O-Si(CH<sub>3</sub>)<sub>3</sub>; octyl heptamethyltrisiloxane having the formula: (CH<sub>3</sub>)<sub>3</sub>-Si-O-Si(CH<sub>3</sub>)(C<sub>8</sub>H<sub>15</sub>)-O-Si(CH<sub>3</sub>)<sub>3</sub>; and mixtures thereof.

As volatile silicones which are usable in the invention, one can also mention the polydimethylsiloxanes with linear chains having 2-6 silicon atoms. These silicones satisfy formula (1) with  $m$  equal to 0,  $n$  equal to 0-6, and  $R_1$  and  $R_2$  representing simultaneously  $\text{CH}_3$  or phenyl. One can mention, for example, the methylpolysiloxanes, such as hexamethyldisiloxane, the methylphenylpolysiloxanes, the ethylpolysiloxanes, the ethylmethylpolysiloxanes, the ethylphenylpolysiloxanes, the hydroxymethylpolysiloxanes, and mixtures thereof.

As volatile silicones, one can also use cyclic silicones having 3-7 units of the  $-\text{R}_1\text{R}_2\text{SiO}-$ , with  $R_1$  and  $R_2$  representing, independently of each other, H, methyl, ethyl or phenyl. As examples, one can mention octamethylcyclopentasiloxane, decamethylcyclopentasiloxane, or mixtures thereof.

As volatile hydrocarbon oils which can be used according to the invention, one can mention the  $\text{C}_3$ - $\text{C}_{20}$  isoparaffins, such as  $\text{C}_{12}$  isoparaffin, called isododecane, and  $\text{C}_{16}$  isoparaffin, such as isohexadecane.

The volatile oils advantageously represent 1-50% of the total weight of the composition, and more advantageously 30-50%.

The composition of the invention can advantageously comprise, in addition to the above-mentioned volatile oils, nonvolatile oily substances that are usually used in the field of application considered, and particularly nonvolatile oils and waxes. The presence of these nonvolatile oils improves the comfort of the composition.

The nonvolatile oils that can be used in the invention particularly include:

- hydrocarbon oils of animal origin, such as perhydrosqualene;
- plant hydrocarbon oils, such as liquid fatty acid triglycerides, for example, sunflower seed, corn, soy, squash, raisin seed, sesame seed, hazelnut, apricot, macadamia, ricinus, avocado oils, the caprylic/capric acid triglycerides such as those sold by the company Stearineries Debuois and those sold under the names of Miglyol 810, 812 and 818 by the company Dynamit Nobel;
- oils having formula  $\text{R}_9\text{COOR}_{10}$ , in which  $\text{R}_9$  represents the residue of a higher acid comprising 7-19 carbon atoms, and  $\text{R}_{10}$  represents a branched hydrocarbon chain containing 3-20 carbon atoms such as, for example, Purcellin oil;
- the linear or branched hydrocarbons of mineral or synthetic origin, such as the nonvolatile paraffin oils and derivatives thereof, petrolatum, polydecenes, hydrogenated polyisobutene, such as Parleam;
- synthetic esters and ethers, such as isopropyl myristate, octanoates, decanoates or ricinoleates of alcohols or polyalcohols;
- fatty alcohols such as actyl [sic; octyl] dodecanol or oleic alcohol;

- partially hydrocarbonated and/or siliconated fluorinated oils, such as those described in the document JP-A-2-295912;

- the siliconated oils, such as the linear nonvolatile polymethylsiloxanes which are liquid or paste-like at ambient temperature, the phenyl dimethicones, the phenyl trimethicones and the polymethylphenylsiloxanes; and

- mixtures thereof.

The nonvolatile oils represent 0-50% of the total weight of the composition, preferably 0-35%, and they are chosen as a function of their compatibility with the organopolysiloxane elastomers.

Advantageously, the composition according to the invention can contain hydrocarbonated, fluorinated or siliconated waxes or mixtures thereof, which may be solid or semisolid (in the form of a paste) at ambient temperature. These waxes can be of plant, mineral, animal and/or synthetic origin. In particular, these waxes present a melting temperature of more than 25°C, and, more advantageously, more than 45°C.

The siliconated waxes can be waxes comprising a siliconated structure and units having one or more alkyl or alkoxy pendant or terminal chains of a siliconated structure, these chains being linear or branched and comprising 10-45 carbon atoms. These waxes are called alkyl dimethicones and alkoxydimethicones, respectively. Moreover, these alkyl chains can comprise one or more ester functions.

The silicone waxes which are usable in the invention include behenoxydimethicone, such as the product sold by Goldschmidt under the name of Abil Wax 2440; stearyl dimethicone, such as the product sold by Dow Corning under the name of DC 2503; cetyl dimethicone, such as the product sold by Goldschmidt under the name of Abil Wax 9814; stearyl methicone, such as the product sold by Goldschmidt under the name of Abil Wax 9809; C<sub>24</sub>-C<sub>28</sub> alkyl dimethicone, such as the product sold by Goldschmidt under the name of Abil Wax 9810, C<sub>30</sub>-C<sub>45</sub> alkyl methicone, such as the product sold by Goldschmidt under the name of Abil Wax 9811, stearoxydimethicone, such as the product sold by Goldschmidt under the name of Abil Wax 2434; behenate dimethicone, such as the product sold by Rhône Poulenc under the name of Myrasil Wax B.

As other silicone waxes which can be used in the invention, one can mention the copolymers of alkyl dimethicones. These copolymers are particularly those described in the documents EP-A-527594, US-A-5 061 481, US-A-5397 566, and EP-A-527594. One can also mention the silicone waxes modified by fluorinated chains, such as those described in the document EP-A-661 042.

As other waxes which can be used in the invention, one can mention the waxes of animal origin, such as lanolin, beeswax; plant waxes such as carnauba or candelilla wax; mineral waxes,



for example, made of paraffin, lignite, or the microcrystalline waxes, ceresin oils or ozocerite; the synthetic waxes, such as the polyethylene waxes.

These oily substances can be chosen in a varied manner by a person skilled in the art to prepare a composition having the desired properties, for example, of consistency or texture.

In particular, the presence of waxes makes it possible to ensure a good mechanical resistance, particularly when the composition is in the form of a stick.

In general, the composition can comprise 0-50% of the total weight of the composition of wax, and preferably 10-30%.

The composition of the invention can comprise, in addition, any additive that is usually used in the field concerned, such as water-soluble or fat-soluble dyes, antioxidants, essential oils, preservatives, cosmetic or dermatological active ingredients, hydrating agents, vitamins, essential fatty acids, lipophilic sunscreens, fat-soluble polymers, particularly hydrocarbon polymers such as the polyalkylenes. These additives can be present in the composition in the amount of 0-20% of the total weight of the composition, and more advantageously 0-10%.

Naturally, a person skilled in the art will make sure to choose any additional additives and/or their quantity in such a manner that the advantageous properties of the composition according to the invention are not, or not substantially, altered by the considered addition. In particular, these additives must not be detrimental to the homogeneity, the stability, the comfort and the "nontransfer" property of the composition.

The compositions according to the invention can particularly be in the form of a stick, or in the form of a flexible or pourable paste, and even in the form of a gelled oily liquid, or of a cream.

The composition according to the invention can be in the form of a colored product for skin makeup, particularly a makeup foundation, a rouge or eyeshadow makeup, a makeup stick for bags under the eyes or a stick for lip makeup, such as a lipstick. They can also be in the form of an uncolored product, optionally containing cosmetic or dermatological active ingredients. In that case, it can be used as a care base for the lips (lip balms, protecting the lips from cold and/or sun and/or wind) or a fixing base to be applied to a standard lipstick. The fixing base then forms a protective film on the lipstick film, thus eliminating its transfer property.

The composition of the invention can also be in the form of a dermatological or skin care composition, or in the form of a composition for protection against the sun.

Naturally, the composition of the invention must be cosmetically or dermatologically acceptable, that is, it must be nontoxic and capable of being applied to the skin or the mucousal membranes (lips, interior of the eyelids) of humans.

It is preferred that the composition of the invention be capable of comprising a particulate phase, which is generally present in the amount of 0-35% of the total weight of the composition,

preferably 5-25%, and which can comprise pigments and/or nacreous substances and/or fillers that are conventionally used in cosmetic compositions.

Pigments are understood to denote white or colored, mineral or organic, particles which are insoluble in wax and volatile silicone, and intended to color and/or opacify the composition. The term fillers is understood to denote colorless or white, mineral or synthetic, lamellar or nonlamellar particles. The term nacreous substances is understood to denote iridescent particles, particularly particles produced by certain mollusks in their shell, or such synthetic particles. These fillers and nacreous substances serve the function of modifying the texture of the composition as well as the effect of dullness/brilliance.

The pigments can be present in the composition in the amount of 0-25% of the weight of the final composition, and preferably in the amount of 5-15%. As mineral pigments which can be used in the invention, one can mention the titanium, zirconium or cerium oxides, as well as the zinc, iron or chromium oxides, and ferric blue. The organic pigments which can be used according to the invention include carbon black, and lacquers of barium, strontium, calcium or aluminum.

The nacreous substances can be present in the composition in the amount of 0-20% of the total weight of the composition, preferably at a high content on the order of 8-15%. The nacreous substances which can be used in the invention include mica coated with titanium oxide, iron oxide, natural pigment or bismuth oxychloride, such as colored titanium mica.

The fillers can be present in the amount of 0-35% of the total weight of the composition, preferably 5-15%. One can particularly mention talc, mica, silica, kaolin, nylon powders (particularly Orgasol) and polyethylene powders, Teflon, starch, boron nitride, microspheres made of copolymers, such as Expancel (Nobel Industrie), Polytrap (Dow Corning) and silicone resin microbeads (for example, Tospearl from Toshiba).

More specifically, the invention relates to a lipstick or a makeup foundation, which is anhydrous and without transfer, characterized in that it contains at least one solid organopolysiloxane elastomer which is at least partially crosslinked, associated with an oily phase containing at least one oil which is volatile at ambient temperature, and pigments and/or fillers.

The composition according to the invention can be manufactured by heating one or more organopolysiloxane or elastomers associated with one or more oils, one or more waxes, one or more pigments, one or more fillers and/or one or more other additives at a temperature which is higher than the highest melting temperature of the waxes, followed by pouring of the molten mixture into a mold. This method allows the obtention of a composition in the solid form of a stick or cupel.

It can also be obtained by extrusion, as described in European Patent Application No. EP-A-667 146. This method consists in blending the paste (waxes + oils + additives + pigments) during the cooling to create zones of crushing in the composition of the paste by means of a cylinder crusher or a screw extruder/mixer. This method allows the preparation of a composition in the form of a soft paste.

The invention also relates to the use of the combination of a silicone which is volatile at ambient temperature and of a solid organopolysiloxane elastomer which is at least partially crosslinked in a composition in order to decrease the transfer of said composition.

The invention also relates to a method to limit and/or prevent the transfer of a makeup or a skin care or lip care composition to a different substrate from said skin or said lips, which consists in introducing into the composition at least one of a solid organopolysiloxane elastomer, which is at least partially crosslinked, and an oil which is volatile at [ambient] temperature.

The invention is illustrated in greater detail in the following examples. The percentages are wt%.

#### Example 1

Phenyl trimethicone	22%
Stearyl dimethicone	4%
Jojoba oil	1%
Organopolysiloxane elastomer (KSG6)	5%
Pigments	8%
Polyethylene wax	20%
Volatile cyclomethicone	40%

Preparation: One causes the organopolysiloxane to swell in the oils, which are nonvolatile at ambient temperature. Then one prepares a paste of the pigments in the gel obtained at 60°C, followed by grinding the entire mixture in a three-cylinder grinder at ambient temperature. The ground material is mixed with the waxes at 95°C, and then the volatile oil is added, followed by pouring into a mold.

A cast lipstick is thus obtained, having a pleasant texture, which spreads well and evenly.

Test: This composition is applied to the left part of the lips of several individuals.

For comparison, one applies to the right part of said lips a "without transfer" lipstick of the prior art, which does not comprise any organopolysiloxane elastomer and an oily phase.

The lipsticks are allowed to dry at ambient temperature for 30 min, and then the entire quantity of lipstick is applied from the lips to a sheet of paper.

One observes, on all the sheets of paper, a very weak, barely perceptible, trace of red, both with the composition of the invention and the composition of the prior art. In addition, the film obtained on the lips with the composition of the invention is recognized as being more comfortable and less dry than the one obtained with the composition of the prior art.

#### Example 2

Organopolysiloxane elastomer (KSG 6)	10%
Behenoxydimethicone (Abil Wax 2440)	5%
Polyethylenic wax	20%
Alkyl dimethicone (X2 5514 from Dow Corning)	20%
Alkyl dimethicone (X2 1731 from Dow Corning)	55%

This composition is prepared as in Example 1.

This composition has a pleasant texture, which spreads well and is applied uniformly. The film obtained on the lips is comfortable to wear over time.

#### Claims

1. Makeup or care composition without transfer, characterized in that it contains at least one solid organopolysiloxane elastomer which is at least partially crosslinked, associated with a oily phase containing at least one oil which is volatile at ambient temperature.

2. Composition according to Claim 1, characterized in that the organopolysiloxane elastomer is obtained by a reaction of addition and of crosslinking, in the presence of a catalyst, of at least:

- (a) an organopolysiloxane having at least two lower  $C_2-C_6$  alkenyl groups per molecule; and

- (b) an organopolysiloxane having at least two hydrogen atoms bound to one silicon atom per molecule.

3. Composition according to Claim 1 or 2, characterized in that the organopolysiloxane is chosen from:

- i) the organopolysiloxanes comprising  $R_2SiO$  and  $RSiO_{1.5}$  units, and optionally  $R_3SiO_{0.5}$  and/or  $SiO_2$  units in which the radicals R, independently of each other, represent a hydrogen, an alkyl such as methyl, ethyl or propyl, an aryl such as phenyl or tolyl, an unsaturated aliphatic group such as vinyl, where the ratio by weight of the  $R_2SiO$  units to the  $RSiO_{1.5}$  units ranges from 1/1 to 30/1;

- ii) the organopolysiloxanes that are insoluble and swellable in silicone oil, obtained by the addition of an organohydrogenpolysiloxane (1) and an organopolysiloxane (2) having

unsaturated aliphatic groups in such a manner that the quantity of hydrogen or of unsaturated aliphatic groups in (1) and (2), respectively, is between 1 and 20 mol% when the organopolysiloxane is noncyclic, and between 1 and 50 mol% when the organopolysiloxane is cyclic.

4. Composition according to any one of the preceding claims, characterized in that the volatile oil is chosen from the silicone oils comprising a linear silicone structure and units with alkyl pendant chain and/or silicone terminal structure, where these alkyl chains can be linear or branched, and comprise 3-10 carbon atoms; the polydimethylsiloxanes with a linear chain having 2-6 silicon atoms; the cyclic silicones having 3-7  $R_1R_2SiO$  units, with  $R_1$  and  $R_2$  representing, independently of each other, H, methyl, ethyl or phenyl; the  $C_3$ - $C_{20}$  isoparaffins and mixtures thereof.

5. Composition according to any one of the preceding claims, characterized in that the oily phase contains, in addition, at least one nonvolatile oil.

6. Composition according to any one of the preceding claims, characterized in that the solid organopolysiloxane elastomer is present in the organopolysiloxane elastomer/oily phase mixture to form a homogeneous gel at a concentration of 0.3-40 wt%.

7. Composition according to any one of the preceding claims, characterized in that the volatile oil is present in a quantity of 1-50%, preferably 30-50%, of the total weight of the composition.

8. Composition according to any one of the preceding claims, characterized in that the oily phase contains, in addition, at least one nonvolatile oil chosen from the hydrocarbon oils of animal or plant origin, the oils having formula  $R_9COOR_{10}$ , in which  $R_9$  represents the residue of a higher fatty acid comprising 7-19 carbon atoms, and  $R_{10}$  represents a branched hydrocarbon chain containing 3-20 carbon atoms; the linear or branched hydrocarbons of mineral or synthetic origin; the fatty alcohols; the synthetic esters or ethers; the linear polymethylsiloxanes which are liquid or pasty at ambient temperature; the phenyl dimethicones; the phenyl trimethicones; the polymethylphenylsiloxanes; the optionally partially hydrocarbonated and/or siliconated fluorinated oils; and mixtures thereof.

9. Composition according to any one of the preceding claims, characterized in that it contains, in addition, at least one wax.

10. Composition according to the preceding claim, characterized in that the wax is chosen from the hydrocarbonated, fluorinated, siliconated waxes and mixtures thereof.

11. Composition according to Claim 9 or 10, characterized in that the wax is present in the amount of 0-50% of the total weight of the composition, preferably 10-30%.

12. Composition according to one of the preceding claims, characterized in that it comprises, in addition, a particulate phase present in the amount of 0-35% [of] the total weight of the composition, preferably 5-25%.

13. Composition according to one of the preceding claims, characterized in that it is in the form of a stick, a flexible or cast paste, a cream or of a gel.

14. Composition according to one of the preceding claims, characterized in that it contains, in addition, at least one cosmetic or dermatological active ingredient.

15. Composition according to one of the preceding claims, characterized in that it is in the form of a composition for makeup foundation, cheek or eyelid makeup, a makeup for bags under the eyes, a lipstick, a care base or a fixing base for the lips, a dermatological product or skin care product, or a composition for protection against the sun.

16. Lipstick or makeup foundation, which is anhydrous and without transfer, characterized in that it contains at least one solid organopolysiloxane elastomer, which is at least partially crosslinked, associated with an oily phase containing at least one oil which is volatile at ambient temperature, pigments and/or fillers.

17. Use of a solid organopolysiloxane elastomer, which is at least partially crosslinked, associated with an oily phase containing at least one oil which is volatile at ambient temperature in the composition for the purpose of decreasing the transfer of said composition.

18. Use according to Claim 17, characterized in that the volatile oil is present in the amount of 1-50%, preferably 30-50%, of the total weight of the composition.

19. Use according to one of Claims 17 or 18, characterized in that the volatile oil is chosen from the silicone oils comprising a linear silicone structure and units with an alkyl pendant chain and/or silicone terminal structure; these alkyl chains being linear or branched and comprising 3-10 carbon atoms; the polydimethylsiloxanes with a linear chain having 2-6 silicon atoms; the cyclic silicones having 3-7  $-R_1R_2SiO-$  units, with  $R_1$  and  $R_2$  representing, independently of each other, H, methyl, ethyl or phenyl; the  $C_3$ - $C_{20}$  isoparaffins, and mixtures thereof.

20. Use according to Claims 17-19, characterized in that the organopolysiloxane elastomer is obtained by a reaction of addition and of crosslinking, in the presence of a catalyst, of at least:

- (a) an organopolysiloxane having at least two lower alkenyl groups per molecule; and
- (b) an organopolysiloxane having at least two hydrogen atoms bound to one silicon atom per molecule.

21. Use according to any one of Claims 17-20, characterized in that the organopolysiloxane is chosen from:

- i) the organopolysiloxanes comprising  $R_2SiO$  and  $RSiO_{1.5}$  units, and optionally  $R_3SiO_{0.5}$  and/or  $SiO_2$  units in which the radicals R, independently of each other, represent a hydrogen, an alkyl such as methyl, ethyl or propyl, an aryl such as phenyl or tolyl, an unsaturated aliphatic group such as vinyl, where the ratio by weight of the  $R_2SiO$  units to the  $RSiO_{1.5}$  units ranges from 1/1 to 30/1;

- ii) the organopolysiloxanes that are insoluble and swellable in silicone oil, obtained by the addition of an organohydrogenpolysiloxane (1) and an organopolysiloxane (2) having unsaturated aliphatic groups in such a manner that the quantity of hydrogen or of unsaturated aliphatic groups in (1) and (2), respectively, is between 1 and 20 mol%, when the organopolysiloxane is noncyclic, and between 1 and 50 mol%, when the organopolysiloxane is cyclic.

22. Use according to one of Claims 17-21, characterized in that the oily phase contains, in addition, at least one nonvolatile oil.

23. Use according to one of Claims 17-22, characterized in that the solid organopolysiloxane elastomer is present in the organopolysiloxane elastomer/oily phase mixture to form a homogeneous gel at a concentration of 0.3-40 wt%.

24. Use according to any one of Claims 17-23, characterized in that the oily phase contains, in addition, at least one nonvolatile oil chosen from the hydrocarbonated oils of animal or plant origin; the oils having formula  $R_9COOR_{10}$ , in which  $R_9$  represents the residue of a higher fatty acid comprising 7-19 carbon atoms, and  $R_{10}$  represents a branched hydrocarbon chain containing 3-20 carbon atoms; the linear or branched hydrocarbons of mineral or synthetic origin; the fatty alcohols; the synthetic esters and ethers; the linear polymethylsiloxanes which are liquid or pasty at ambient temperature; the phenyl dimethicones; the phenyl trimethicones; the polymethylphenylsiloxanes; the optionally partially hydrocarbonated and/or siliconated fluorinated oils; and mixtures thereof.

25. Use according to any one of Claims 17-24, characterized in that it contains, in addition, at least one wax.

26. Use according to the preceding claim, characterized in that the wax is chosen from the hydrocarbonated, fluorinated, siliconated waxes and mixtures thereof.

27. Use according to Claim 25 or 26, characterized in that the wax is present in the amount of 0-50% of the total weight of the composition, preferably 10-30 wt%.

28. Use according to one of Claims 17-27, characterized in that the composition comprises, in addition, a particulate phase present in the amount of 0-35% of the total weight of the composition, preferably 5-25%.

29. Use according to one of Claims 17-28, characterized in that the composition is in the form of a stick, a flexible or cast paste, or of a cream or of a gel.

30. Use according to one of Claims 17-29, characterized in that the composition contains, in addition, at least one cosmetic or dermatological active ingredient.

31. Use according to one of Claims 17-30, characterized in that the composition is in the form of a composition for makeup foundation, cheek or eyelid makeup, a makeup for bags under the eyes, or lipstick, in a care base or in a fixing base for the lips, a skin care product or a sunscreen composition.

32. Method to limit and/or prevent the transfer of a skin or lip makeup or care composition to a substrate different from said skin and said lips, consisting in introducing into the composition a solid organopolysiloxane elastomer and an oily phase comprising at least one oil which is volatile at ambient temperature.



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## EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>6</sup> )
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<b>CATEGORY OF CITED DOCUMENTS</b> X: Particularly relevant if taken alone. Y: Particularly relevant if combined with another document of the same category. A: Technological background. O: Non-written disclosure. P: Intermediate document. T: Theory or principle underlying the invention. E: Earlier patent document, but published on, or after the filing date. D: Document cited in the application. L: Document cited for other reasons. ..... &: Member of the same patent family, corresponding document.			

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